REMARKS

- Claims **1-15, 32 and 57-71** are pending in the present application.
- Of the pending claims, only claims **1 and 32** are independent.
- Upon entry of the present amendment, which is respectfully requested, claims **1, 3, 32, 63, 65, and 66** will be amended, and claims **1 – 15, 32, and 57 – 71** will remain pending.

I. Telephone Interview Summary

Applicants thank Examiner for extending the courtesy of a telephone interview on May 30, 2002. The amendments made herein are believed to be in conformance with the discussion regarding the §102 and §112 rejections made in the Office Action mailed March 15, 2002.

During the interview, Examiner expressed concern that claim 1 did not require that each step be performed by a computing device and objected to claim 1 under §101 based on the "mental process" doctrine. Applicants do not believe any amendment of the claims is necessary to overcome this concern, for the reasons set forth below.

Also discussed during the interview was Examiner's rejection of claims 1 – 15, 32, and 57 – 71 under §101 based on Examiner's concern that the independent claims 1 and 32 "merely" calculate a purchase total, without somehow applying the calculated purchase total, such as by "outputting or "displaying" it. Examiner requested that Applicants add a step to claims 1 and 32, respectively, where the calculated purchase total is, for example, output or displayed or applied in some other express manner. Applicants have not amended the claims in such a manner, for the reasons set forth below.

While Applicants sincerely appreciate Examiner's suggestions, claims 1 and 32 are believed to be statutory as pending because calculating a purchase total is a "useful, concrete, and tangible result" as recited in independent claims 1 and 32. Post-solution activity is not required under §101. Further, the Federal Circuit has held that a claimed system was patentable

subject matter even though it only determined prices because a price is a useful, concrete, and tangible result (as discussed in more detail below).

II. Claim Objection

Claim 3 was objected to because Applicants failed to indicate that "completed to" had been changed to "performed after" in the Amendment filed in response to the Office Action mailed October 18, 2001. The amendment of the "completed term" was an unintended typographical error. Applicants have amended claim 3 herein to again recite the term "completed after" as it was included in claim 3 before the previous amendment.

III. Section 101 Rejections

1. "Useful, concrete, and tangible result" rejection

Claims **1 – 15, 32, and 57 - 71** stand rejected as being non-statutory. Examiner states that the rejected claims are "drawn to a method of producing a disembodied data structure" and that they are drawn to subject matter "for merely manipulating an abstract idea without producing any 'useful, concrete, and tangible result'". (Page 3, ¶6 of paper no.14, quoting *In re Wamerdam*, 33 F.3d 1354; 31 USPQ2d 1754 (Fed. Cir. 1994). Applicants respectfully traverse the Examiner's Section 101 rejection.

Focusing on independent claim 1 and 32, for purposes of brevity, Applicants note that both claims are directed to "a method of calculating a purchase total for a transaction" and recite a step of "calculating a reduced purchase total". A purchase total is a useful, concrete, and tangible result. Thus, a method for determining such a purchase total is statutory subject matter.

A claimed invention that produces a useful, concrete and tangible result constitutes statutory subject matter. AT & T Corp. v. Excel Communications Inc., 172 F.3d 1352, 1356, 50 USPQ2d 1447, 1451 (Fed. Cir. 1999); State Street Bank v. Signature Financial Trust, 149 F.3d 1368, 1373, 47 USPQ2d 1596, 1601 (Fed. Cir. 1998), cert. denied, 119 S. Ct. 851 (1999).

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The Federal Circuit has held that a claimed processing system was patentable subject matter because the system determines a final share *price,* which is a *useful, concrete, and tangible result.* State Street Bank, 149 F.3d at 1373, 47 USPQ2d at 1601. "[W]e hold that the transformation of data, representing discrete dollar amounts, by a machine through a series of mathematical calculations into a final share price, constitutes a practical application of a mathematical algorithm, formula or calculation, because it produces 'a useful, concrete, and tangible result' - - a final share price...[E]ven if the useful result is expressed in numbers, such as price, profit, percentage, cost or loss", the invention that produces that result is nevertheless statutory. State Street Bank, 149 F.3d at 1374. Applicants note that the independent claim at issue in the State Street Bank case, as upheld by the Federal Circuit, recited a machine which functioned to determine a final share price of a mutual fund. The independent claim did not recite any specific application of the share price.

The purchase total determined in claims 1 and 32 does have a myriad of practical real world applications, as disclosed in the specification. For example, a customer may be charged a monetary amount that is the determined reduced purchase total for the products included in the purchase for which the reduced purchase total is calculated. The reduced purchase total may also be displayed at a point-of-sale terminal, printed on a register receipt, and / or stored for subsequent accounting purposes. These example uses need not be recited, just as no uses were recited in the claims in State Street Bank.

Claims 1 and 32 are directed to statutory subject matter. Claims 2 – 25 are each dependent on claim 1 and thus statutory for the same reasons as claim 1. Claims 57 – 71 are each dependent on claim 32, incorporate each of the limitations of claim 32, and are thus statutory for the same reasons as claim 32. Accordingly, Applicants respectfully request that the §101 rejection of claims 1 – 15, 32, and 57 – 71 be withdrawn.

Applicants note that dependent claim 5 (dependent on claim 1) and claim 60 (dependent on claim 32) each recite, in particular, a practical use of the reduced purchase total determined in claim 1 and 32, respectively. Specifically, claim 5 and claim 60 each recite "applying the reduced purchase total as a final purchase total for the transaction." Thus, Applicants submit that claims 5 and 60 overcome Examiner's §101 concerns.

2. "Mental steps" concern

During the telephone interview of May 30, 2002 Examiner expressed concern that independent claim 1 did not require that the method of claim 1 be implemented on a computing device or other apparatus and that it may be construed as a purely mental process, as "performed in someone's head." Applicants understand Examiner's underlying concern to be that the claim is directed to non-statutory subject matter because some or all of the steps may be performed by the human mind.

Applicants agree that the method of claim 1 does not require that any or all of the steps recited therein be implemented on a computing device or other apparatus, although they certainly can be in accordance with some disclosed embodiments of the present invention. However, the mere fact that some or all of the steps of a method "may be carried out in or with the aid of the human mind or because it may be necessary for one performing the processes to think" does not render a sequence of operational steps non-statutory under 35 U.S.C. §101. In Re Musgrave, 57 C.C.P.A. 1352, 431 F.2d 882 (C.C.P.A. 1970). The court, in Musgrave, rejected the Examiner's reasoning that the claims at issue were non-statutory under 35 U.S.C. §101 merely because they" include no physical steps but set forth merely a method for processing data which does not require any tangible device or apparatus to carry out the method and hence could be carried out mentally." The court, in Musgrave, reiterated its holding in an earlier case, that "patent protection for a process disclosed as being a sequence or combination of steps, capable of performance without human intervention...is not precluded by the mere fact that the process could alternatively be carried out by mental steps." In Re Prater, 56 C.C.P.A. 1376, 415 F.2d 1378 (C.C.P.A. 1968).

Further, the Federal Circuit has recently stated that "[t]he existence of mental steps in the claims or specification of a patent do not, in and of themselves, invalidate the patent." Musco Corp. v. Qualite Inc., 106 F.3d 427 (Fed. Cir. 1997)(unpublished).

If Examiner has another reason for being concerned that some or all of the steps of claim 1 may be carried out in or with the aid of the human mind (besides the statutory subject matter concern basis discussed above), Applicants respectfully request that Examiner inform Applicants

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of the statutory reason for the concern such that Applicants may respond to Examiner's additional concerns.

IV. Section 112 Rejections

1. Claim 63

Claim 63 stands rejected as being indefinite under 35 U.S.C. §112, second paragraph. Examiner asserts that defining the term "threshold" in claim 63 as being "a range" gives the term a meaning repugnant to the usual meaning of the term (which Examiner further asserts to be "minimum"). Applicants respectfully traverse the Examiner's Section 112 rejection.

Applicants disagree that the accepted meaning of the term "threshold" is "minimum" and that defining a threshold as a range gives the term a meaning repugnant to its usual meaning. For example, Mirriam Webster's Collegiate Dictionary, 10th Edition (1995), defines "threshold" as "a level, point, or value above which something is true or will take place and below which it is not or will not." A copy of this definition is enclosed. Accordingly, a threshold may be a maximum level up to which something will not take place as well as a minimum above which something will take place. A range may be characterized as being comprised of both a minimum and a maximum.

For purposes of expediting prosecution only, however, Applicants have amended claim 63 herein. Claim 63 now recites that a "threshold purchase total" is a "minimum purchase total" and that the step of determining further comprises "determining whether the initial purchase total is not greater than a predetermined maximum purchase total, thus determining whether the initial purchase total is within a range of purchase totals." The §112 rejection of claim 63 is thus moot.

2. Claims 65 and 66

Claims 65 and 66 stand rejected under 35 U.S.C. §112, second paragraph, as being indefinite. Examiner asserts that "it appears that nothing more has been disclosed or is being claimed than merely a first "price" and a second "price" for each product." Applicants respectfully traverse Examiner's §112 rejection of claim 65 and 66.

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Claim 65 recites that "the first price is associated with a first pricing tier and the second price is associated with a second pricing tier". This limitation recites that the first price is associated with a first group of prices (a first pricing tier) and the second price is associated with a second group of prices (a second pricing tier). Thus, the limitation discloses more than just the first price and the second price of claim 32, on which claim 65 is dependent. Applicants have amended claim 65 to clarify that a "first pricing tier" is a "first group of prices" and that a "second pricing tier" is a "second group of prices". Accordingly, the §112 rejection of claims 65 and 66 is believed to have been overcome.

V. Section 102 Rejections

Claims **1 – 15, 32, and 57 – 71** stand rejected under 35 U.S.C. §102 (a) and / or (b) (not clear from rejection) as anticipated by "admitted prior art, as described in the specification and drawings". Claims 1 – 15, 32, and 57 – 71 also stand rejected under 35 U.S.C. §102(b) as being anticipated by each of U.S. Patent No. 5,444,630 to Dlugos and U.S. Patent No. 5,056,019 to Schultz et al. Applicants respectfully traverse the Examiner's Section 102 rejections.

1. Claims 1 and 32

Claims 1 and 32, as amended herein, each recite the following limitation regarding second prices used to calculate a reduced purchase total:

> "a percentage difference between one first price and the corresponding second price of a first product to be purchased in the transaction is different than a percentage difference between another first price and the corresponding second price of a second product to be purchased in the transaction".

Such a limitation is not taught or suggested by any of the prior art of record, alone or in combination. This limitation offers significant advantages over the prior art systems because it

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allows a seller to offer discounts on all or most products in a store, thus attracting customers to spend more, while preserving an acceptable profit margin on each product.

As explained by Applicants in the Background section of the specification "[n]one of the known discounting and promotional techniques fully addressed the need to balance the attractive features of discounting and preservation of profit margins on the products sold." In the prior art systems sellers were constrained by either having to only offer a discount on a few selected products or offering an across-the-board discount (*e.g.*, 10% off across the board) on everything in a purchase. In the former system, the disadvantage was that a seller would only attract customers that were interested in purchasing the discounted products. In the latter system, the disadvantage was that the seller risked the customer focusing his purchases on low margin items, thus making a purchase unprofitable for the seller. The claimed embodiments solve the problems of the prior art by permitting a seller "to predetermine and store one or more levels of discount prices on a product-by-product basis. The seller may therefore be able to carefully balance the reduction in profit margin for each product with the overall level of spending made by the customer." (pg. 3, line 81 – 84 of the specification as filed).

1(a). The Dlugos Reference

The Dlugos patent addresses a method for applying discount rates to transaction charges in a shipping system. However, Dlugos only discloses applying the same discount rate (*e.g.*, 10% across the board) to all items in a transaction. Dlugos does not disclose or suggest applying a different discount rate to individual items in a transaction. Accordingly, Dlugos does not teach or suggest the limitation of claim 1 and claim 32 that "a percentage difference between one first price and the corresponding second price of a first product to be purchased in the transaction is different than a percentage difference between another first price and the corresponding second price of a second product to be purchased in the transaction".

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1(b). The Schultz Reference

The Schultz patent discloses a system for tracking consumer purchases to determine whether a customer has earned a purchase rebate. The Schultz patent does not disclose *calculating an initial purchase total for a transaction based on first prices of products and then calculating a second purchase total based on second prices of products if the first purchase total is at least equal to a predetermined threshold*

Rather than being provided with a reduced purchase total in a particular transaction, the Schultz patent discloses a system wherein a customer is provided with a purchase rebate after completing a plurality of purchases. Further, Schultz does not disclose or suggest providing any rebate or other discount based on whether an initial purchase total is at least equal to a threshold purchase total. Thus, the Schultz patent does not teach or suggest the limitations of independent claims 1 and 32.

2. Conclusion regarding §102 rejection

None of the prior art of record, alone or in combination, expressly or inherently teaches each of the limitations of either claim 1 or claim 32. Accordingly, Applicants respectfully submit that claims 1 and 32 are allowable for the reasons set forth above.

Claims 2 – 15 are each dependent on claim 1 and thus include each of the limitations of claim 1. Accordingly, Applicants submit that claims 2 – 15 are allowable at least for the reasons that claim 1 is allowable. Claims 57 – 71 are each dependent on claim 32 and thus include each of the limitations of claim 32. Accordingly, Applicants respectfully submit that claims 57 – 71 are allowable at least for the same reasons that claim 32 is allowable.

Conclusion

For the foregoing reasons it is submitted that all of the claims are now in condition for allowance and the Examiner's early re-examination and reconsideration are respectfully requested.

Alternatively, if there remains any question regarding the present application or any of the cited references, or if the Examiner has any further suggestions for expediting allowance of the present application, the Examiner is cordially requested to contact Magdalena M. Fincham at telephone number 203-461-7041 or via electronic mail at mfincham@walkerdigital.com.
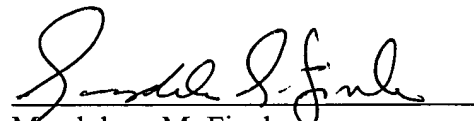
Petition for Extension of Time to Respond

Applicants hereby petition for a **three-month** extension of time with which to respond to the Office Action. Please charge $**460.00** for this petition to our Deposit Account No. 50-0271. Please charge any additional fees that may be required for this Response, or credit any overpayment to Deposit Account No. 50-0271.

If an extension of time is required, or if an additional extension of time is required in addition to that requested in a petition for an extension of time, please grant a petition for that extension of time which is required to make this Response timely, and please charge any fee for such extension to Deposit Account No. 50-0271.

Respectfully submitted,

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Date

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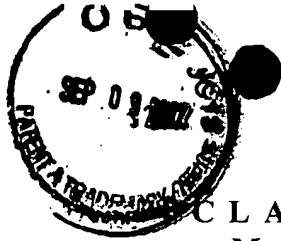
CLAIM AMENDMENTS
MARKED UP FORM

Please **SUBSTITUTE** the following claims for the pending claims of the same number. Claims **1, 32, 63, 65 and 66** have been **AMENDED** herein, and are indicated as such and present in **bold face** type.

1.   (AMENDED) **A method of calculating a purchase total for a transaction, the method comprising the steps of:**

receiving a plurality of product identifiers, each of the product identifiers representing a respective product to be purchased;

calculating an initial purchase total for the transaction based on respective first prices for each of the products to be purchased;

determining whether the initial purchase total is at least equal to a predetermined threshold purchase total; and

if the initial purchase total is at least equal to the predetermined threshold purchase total, calculating a reduced purchase total for the transaction based on respective second prices for each of the products to be purchased,

at least one of the respective second prices being lower than the corresponding first price for the product to be purchased,

wherein at least one of the respective second prices is calculated based on at least one of (i) the first price, (ii) a cost associated with the corresponding product, and (iii) a minimum profit amount, and

wherein a percentage difference between one first price and the **corresponding second price for a first product to be purchased in the transaction**

is different than

a percentage difference between another first price and the corresponding **second price of a second product to be purchased in the transaction.**

2.   A method according to claim 1, further comprising the step of retrieving the first and second prices from a database.

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3.   (TWICE AMENDED)   A method according to claim 2, wherein the retrieving step is [performed after] <u>completed before</u> the step of calculating the initial purchase total.

4.   A method according to claim 2, wherein a portion of the retrieving step is performed after the step of calculating the initial purchase total.

5.   A method according to claim 1, further comprising the step of applying the reduced purchase total as a final purchase total for the transaction.

6.   A method according to claim 1, further comprising the steps of:
     determining whether the reduced purchase total is less than the predetermined threshold purchase total; and
     if the reduced purchase total is less than the predetermined threshold purchase total, applying the initial purchase total as a final purchase total for the transaction.

7.   A method according to claim 1, wherein the receiving step includes entering the product identifiers into a point of sale terminal.

8.   A method according to claim 7, wherein the entering step includes using a bar code reader to read respective bar codes on the products to be purchased.

9.   A method according to claim 1, wherein the receiving step includes receiving product identifiers entered by a customer via a Web site.

10.   A method according to claim 1, wherein the receiving step includes entering product identifiers into a computer terminal in response to communication with a customer.

11.   A method according to claim 1, further comprising the step of displaying the first and second prices in a retail store.

12. A method according to claim 1, further comprising the step of displaying in a retail store the first prices and respective discount amounts which define the second prices.

13. A method according to claim 1, further comprising the step of displaying in a retail store the first prices and respective discount percentages which define the second prices.

14. A method according to claim 1, further comprising the step of printing the first and second prices in a catalog.

15. A method according to claim 1, further comprising the step of displaying the first and second prices on a monitor component of a customer's computer in response to the customer accessing a Web site.

32. (AMENDED) A method of calculating a purchase total for a transaction, the method comprising the steps of:

receiving a plurality of product identifiers, each of the product identifiers representing a respective product to be purchased;

calculating an initial purchase total for the transaction based on respective first prices for each of the products to be purchased;

determining whether the initial purchase total is at least equal to a predetermined threshold purchase total; and

if the initial purchase total is at least equal to the predetermined threshold purchase total, calculating a reduced purchase total for the transaction based on respective second prices for each of the products to be purchased, at least one of the respective second prices being lower than the corresponding first price for the product to be [purchase] purchased,

wherein a percentage difference between one first price and the corresponding second price for a first product to be purchased in the transaction

is different than

a percentage difference between another first price and the corresponding second price of a second product to be purchased in the transaction.

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57.   The method of claim 32, further comprising:

retrieving the first and second prices from a database.

58.   The method of claim 32, wherein the method is performed by a point-of-sale terminal.

59.   The method of claim 58, wherein the method is performed by a point-of-sale terminal in a grocery store.

60.   The method of claim 32, further comprising:

applying the reduced purchase total as a final purchase total for the transaction.

61.   The method of claim 32, wherein the method is performed by a computer in response to a purchase by a remote customer of a web site.

62.   The method of claim 61, further comprising:

causing the reduced purchase total to be displayed to the customer.

63.   (AMENDED) The method of claim 32, wherein the predetermined threshold purchase total comprises a <u>minimum purchase total, and wherein</u> [range of values and]

the step of determining whether the initial purchase total is at least equal to a predetermined threshold total <u>further</u> comprises determining whether the initial purchase total is <u>less than a predetermined maximum purchase total,</u>

<u>thereby determining whether the initial purchase total is within a predetermined range of purchase totals</u>[within the range of values].

64.   The method of claim 32, wherein the predetermined threshold purchase total comprises at least one of (i) a purchase total of a single transaction, (ii) a purchase total of a plurality of transactions, and (iii) an average purchase total of a plurality of transactions.

65.   (AMENDED) The method of claim 32, wherein at least one of the plurality of product identifiers corresponds to at least two pricing tiers <u>that are groups of prices,</u>

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wherein the first price is associated with a first group of prices [pricing tier] and the second price is associated with a second group of prices[pricing tier].

66.   (AMENDED) The method of claim 65, wherein the first [pricing tier]group of prices is associated with a first predetermined threshold purchase total and the second [pricing tier] group of prices is associated with a second predetermined threshold purchase total.

67.   The method of claim 32, further comprising:

determining an amount that is a difference between the initial purchase total and the predetermined threshold total.

68.   The method of claim 67, further comprising:

determining at least one of the respective second prices of at least one of the products to be purchased based on the difference.

69.   The method of claim 32 wherein at least one of the respective second prices of at least one of the products to be purchased is determined based on purchasing history data associated with a customer that is associated with the transaction.

70.   The method of claim 32 wherein the predetermined threshold purchase total is selected based on purchasing history data associated with a customer that is associated with the transaction.

71.   The method of claim 32 wherein at least one of the predetermined threshold purchase total and the respective second prices is selected based on a customer identifier of a customer that is associated with the transaction.